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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/710,456 | 07/13/2004 | Douglas A. Kemp | 27475/05432 | 4455 |

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| EXAMINER | |
|---|---|
| LE, HUYEN D | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3751 | |

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/710,456 | KEMP ET AL. | |
| | Examiner | Art Unit | |
| | Huyen Le | 3751 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *34-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *34-40,45-50,52 and 54-66* is/are rejected.

7)☒ Claim(s) *41-44,51 and 53* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *07/13/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Drawings*

1. The replacement drawing was received on 03/09/2006. This drawing is acceptable

### *Specification*

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The invention is," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Objections*

3. Claim 45 is objected to because of the following informalities: claim should be ended with a period instead of ",". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 34-40, 45-50, 54, 56, 57, 59, 63-66 are rejected under 35 U.S.C. 102(b) as being anticipated by Hobday (4,220,322).

The Hobday reference discloses a removable clamping device comprising: a first arm assembly 2 for contacting a first side of an exposed wall, a second arm assembly 7 for contacting a second side of the exposed wall, and a ratcheting mechanism 10,13,18; wherein the arm first assembly 2 is coupled to the second arm assembly by the

ratcheting mechanism; wherein the first arm assembly 2 is fixed relative to the ratcheting mechanism, wherein the second arm assembly 7 is operable to move toward the first arm assembly 2 via the ratcheting mechanism; and wherein the ratcheting mechanism restricts movement of the second arm assembly 7 away from the first arm assembly 2 and allows movement of the second arm assembly 7 toward the first arm assembly 2.

Regarding claim 35, the first arm assembly 2 includes a pad 3 which prevents slippage when the first arm assembly 2 contacts the first side of the exposed wall.

Regarding claim 36,the second arm assembly 7 includes a pad 9 which prevents slippage when the second arm assembly 7 contacts the second side of the exposed wall.

Regarding claim 37, the device comprises a clamp assembly 15, wherein the clamp assembly 15 is connected to the ratcheting mechanism, and wherein actuating the clamp assembly 15 causes the second arm assembly 7 to move toward the first arm assembly 2.

Regarding claim 38, the clamp assembly 15 is operable to convert a rotational force into an increased linear force for moving the second arm assembly toward the first arm assembly.

Regarding claim 39, the clamp assembly 15 includes a lever coupled to a cam 27 in contact with the first arm assembly 2, wherein the cam 27 is configured to redirect and multiply a force placed on a portion of the lever distal to the cam to rotate the lever

15, and wherein the force used to actuate the lever 15 is redirected to displace the second arm assembly 7 in a linear manner toward the first arm assembly.

Regarding claim 40, the device comprises a handle assembly 13.

Regarding claim 45, the ratcheting mechanism includes a locking member 10 and a locking plate 29, wherein the locking member 10 includes a plurality of teeth 11, and wherein the locking plate 29 selectively engages the teeth 11 to restrict movement of the second arm assembly 7 away from the first arm assembly 2 and allow movement of the second arm assembly 7 toward the first arm assembly.

Regarding claim 46, a length of the locking member 7 is substantially greater than a height of the locking member 8.

Regarding claim 47, a length of the locking member 7 is substantially greater than a width of the locking member 7.

Regarding claim 48, a height of the locking member 7 is greater than a width of the locking member 7.

Regarding claim 49, the removable device comprises a spring mounted on the locking member 29 and in communication the locking plate 29, wherein the spring urges the locking plate 29 toward the first arm assembly 2.

Regarding claim 50, the removable device further comprises a locking plate release mechanism 25, wherein the locking plate release mechanism 25 is operable to disengage the locking plate 29 from the teeth 11 to allow movement of the second arm assembly 7 away from the first arm assembly 2.

Regarding claim 54, at least one of the locking member 10 and the locking plate 29 are formed of a hardened material.

Regarding claim 56, each of the plurality of teeth 11 is a tooth having a first edge portion and a second edge portion.

Regarding claim 57, the tooth 11 has a characteristic angle defined by an intersection of the first edge portion and the second edge portion at a peak of the tooth.

Regarding claim 59, the tooth 11 has a characteristic angle defined as an angle between the first edge portion and a line passing through a valley where two adjacent teeth meet.

Regarding claim 65, the means for ratcheting includes a notched bar 10, in contact on a first end to the first arm assembly and in contact on a second end to the second arm assembly, and at least one pawl 29 locatable in a notch to restrict movement of the notched bar with respect to the at least one pawl 29.

Regarding claim 66, the device further comprises a first lever 15 and a second lever 12, wherein the first lever controls the means for ratcheting to cause the second arm 7 assembly to move toward the first arm assembly 2, and the second lever 12 controls the means for ratcheting to allow the second arm 7 to move away from the first arm assembly 2.

6. Claims 34, 37-40, 45-48, 50, 52, 54, 56, 57, 59, 61, 63-66 are rejected under 35 U.S.C. 102(b) as being anticipated by Flinn (4,893,801).

The Flinn reference discloses a removable clamping device comprising: a first arm assembly 14 for contacting a first side of an exposed wall, a second arm assembly

16 for contacting a second side of the exposed wall, and a ratcheting mechanism 18,30,32; wherein the arm first assembly 14 is coupled to the second arm assembly by the ratcheting mechanism; wherein the first arm assembly 14 is fixed relative to the ratcheting mechanism, wherein the second arm assembly 16 is operable to move toward the first arm assembly 14 via the ratcheting mechanism; and wherein the ratcheting mechanism restricts movement of the second arm assembly 16 away from the first arm assembly 14 and allows movement of the second arm assembly 16 toward the first arm assembly 14.

Regarding claim 37, the device comprises a clamp assembly 28, wherein the clamp assembly 28 is connected to the ratcheting mechanism, and wherein actuating the clamp assembly 28 causes the second arm assembly 16 to move toward the first arm assembly 14.

Regarding claim 38, the clamp assembly 28 is operable to convert a rotational force into an increased linear force for moving the second arm assembly 16 toward the first arm assembly 14.

Regarding claim 39, the clamp assembly 28 includes a lever coupled to a cam in contact with the first arm assembly 14, wherein the cam is configured to redirect and multiply a force placed on a portion of the lever distal to the cam to rotate the lever 28, and wherein the force used to actuate the lever 28 is redirected to displace the second arm assembly 16 in a linear manner toward the first arm assembly 14.

Regarding claim 40, the device comprises a handle assembly 26.

Regarding claim 45, the ratcheting mechanism includes a locking member 18 and a locking plate 32, wherein the locking member 18 includes a plurality of teeth 18C, and wherein the locking plate 32 selectively engages the teeth 18C to restrict movement of the second arm assembly 16 away from the first arm assembly 14 and allow movement of the second arm assembly 16 toward the first arm assembly 14.

Regarding claim 46, a length of the locking member 18 is substantially greater than a height of the locking member 18.

Regarding claim 47, a length of the locking member 18 is substantially greater than a width of the locking member 18.

Regarding claim 48, a height of the locking member 18 is greater than a width of the locking member 18.

Regarding claim 50, the removable device further comprises a locking plate 34 release mechanism 20, wherein the locking plate release mechanism 20 is operable to disengage the locking plate 32 from the teeth 18C to allow movement of the second arm assembly 16 away from the first arm assembly 14.

Regarding claim 52, a plurality of teeth 18C form a first row of teeth on the top surface of the locking member 18 and a second row of teeth on a bottom surface of the locking member 18.

Regarding claim 54, at least one of the locking member 10 and the locking plate 29 are formed of a hardened material.

Regarding claim 56, each of the plurality of teeth 18C is a tooth having a first edge portion and a second edge portion.

Regarding claim 57, the tooth 11 has a characteristic angle defined by an intersection of the first edge portion and the second edge portion at a peak of the tooth.

Regarding claim 59, the tooth 11 has a characteristic angle defined as an angle between the first edge portion and a line passing through a valley where two adjacent teeth meet.

Regarding claim 61, the tooth 11 has a characteristic angle defined as an angle between the second edge portion and a line passing through a valley where two adjacent teeth meet.

Regarding claim 65, the means for ratcheting includes a notched bar 18, in contact on a first end to the first arm assembly 14 and in contact on a second end to the second arm assembly16 , and at least one pawl 32 locatable in a notch to restrict movement of the notched bar with respect to the at least one pawl 32.

Regarding claim 66, the device further comprises a first lever 28 and a second lever 20, wherein the first lever 28 controls the means for ratcheting to cause the second arm 16 assembly to move toward the first arm assembly 14, and the second lever 20 controls the means for ratcheting to allow the second arm 16 to move away from the first arm assembly 14.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hobday (4,220,322).

Although the Hobday reference does not specifically disclose that device is made of stainless steel, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select stainless steel, since selecting a known material on the basis of its suitability for the intended use is a mere matter of obvious design choice. In re Leshin, 125 USPQ 416.

9. Claims 58 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hobday (4,220,322).

Although the Hobday reference does not specifically disclose that the characteristic angle is about 100 or 70 degrees, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select an angle to best fit the teeth of the locking member in order to optimize its performance, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ (CCPA 1980).

10. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flinn (4,893,801) in view of Hobday (4,220,322).

Although Flinn does not disclose that the first and second arm assemblies include a pad which prevents slippage, attention is directed to Hobday which teaches a clamping device having a pad on the first and second arm.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a pad on the first and second arm assemblies of the

Flinn device in view of the teaching of Hobday reference for preventing the slippage when in contact with a surface.

11. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flinn (4,893,801)

Although the Flinn reference does not specifically disclose that device is made of stainless steel, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select stainless steel, since selecting a known material on the basis of its suitability for the intended use is a mere matter of obvious design choice. In re Leshin, 125 USPQ 416.

12. Claims 58, 60 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flinn (4,893,801)

Although the Flinn reference does not specifically disclose that the characteristic angle is about 100 or 70 degrees, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select an angle to best fit the teeth of the locking member in order to optimize its performance, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ (CCPA 1980).

***Allowable Subject Matter***

13. Claims 41-44, 51, 53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Le whose telephone number is 571-272-4890. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Huyen Le
Examiner
Art Unit 3751

July 28, 2006